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## Cotton Fiber and Processing Test Results

CROP of 1977



Agricultural Marketing Service  
U.S. DEPARTMENT OF AGRICULTURE  
Memphis, Tenn. 38122 October 7, 1977

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1977

Discussion of Test Results

The average Fibrograph 2.5% span length of medium staple samples tested from the Southwest through September 30 is the same as a year ago at this time, according to the Cotton Division, Agricultural Marketing Service, USDA. Cottons tested to date show the same uniformity and fineness properties as a year ago. Samples tested are stronger at zero gage fiber strength tests. Picker and card waste is lower than a year ago. Yarns spun from these samples are slightly stronger than a year ago. The average appearance index is lower. The average spinning potential yarn number is slightly higher.

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These reports are published bi-weekly during the harvesting season and will be summarized in a comprehensive report at the end of the crop year. A detailed description of the tests shown in this report may be found in the summary report for the previous season.<sup>1</sup> These reports are available on request from the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, 4841 Summer Avenue, Memphis, TN 38122.

<sup>1</sup>/ Summary of Cotton Fiber and Processing Test Results, Crop of 1976,  
USDA, AMS, Cotton Division, June 1977.

Table 1.--Cotton:

Averages of fiber and processing tests from selected gin points in the United States through September 30, 1977

Staple group Area, and Crop year	Lots tested	Fiber test results						Processing test results					
		Fibrograph		Mike fine- ness		S A nonlint gage		P & C waste		Yarn quality		Spin. Potent.	
		2.5% span	50/2.5 unif.	Zero gage	1/8" gage	nonlint	str.	Skein str.	Appear- ance	Imperf- ections	Index	No.	Yarn No.
No.	Inches	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Lbs.	Index	22s Carded	Index	No.	Yarn No.
Short Staple:													
Southwest	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	14	.97	45	3.9	90	22	3.5	5.5	98	107	13	43	
1977													
Medium Staple:													
Southeast	-	-	47	4.8	87	23	3.9	5.8	103	93	23	51	
1976	3	1.05	47	4.8	87	23	3.9	5.8	103	93	23	51	
1977													
South Central	-	-	46	4.5	88	23	3.5	5.4	111	96	22	61	
1976	24	1.12	46	4.5	88	23	3.5	5.4	111	96	22	61	
1977													
Southwest	19	1.06	46	4.2	81	22	3.1	6.0	105	101	18	58	
1976	27	1.06	46	4.2	84	22	3.2	5.3	107	93	16	60	
1977													
Significant dif- ference 2/		0.02	2	0.2	2	1	0.5	0.5	4(22s)	5	2	3	

1/  
2/Based on a limited number of samples of modal quality  
Minimum differences considered to be significant for comparisons in this table.

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1977

Production Area, Classification				Fiber Test Results								Processing Test Results - Carded Yarns											
Sample Number		Digital Fibrograph	Mike	Fiber Strength	S.A.	Color Stock	Strength	Elongation	Appearance Index	Imperfect 'ns		Spin. Potential											
No	Grade	2.5% span	Unif span	Zero Gage	1/8" Gage	Raw Stock	P & C Waste	8s or 22s or 74 tx															
32s	In	Pct	Rdg	Mpsi	G/tex	Pct	Pct	No	No	Pct	Pct	No											
SOUTHWEST AREA																							
CENTRAL TEXAS																							
BARDWELL	32	30	0.95	46	4.3	90	21	5.6	2.9	2	5	5.0	270	85	6.0	5.3	120	110	21	11	38		
BRANDON	32	30	0.90	46	4.0	88	20	6.0	611	3.0	2	4	4.8	288	93	7.0	6.0	120	120	22	13	35	
DILLEY	2 SLM	LT SP	42 1/33	0.99	43	2.9	85	22	6.1	SP21	3.4	0	4	5.7 <sup>2/</sup>	295	106	7.7	6.5	120	90	42	19	56
	3 SLM	LT SP	42 1/32	1.01	45	3.0	84	21	6.0		4.2	0	4	5.6	304	108	7.7	6.4	120	100	28	21	50
ITASCA	31	30	0.95	45	4.5	94	22	5.7	LANKART LX571	3.2	1	4	5.1	276	96	6.8	5.3	130	110	20	11	39	
LOTT	2 MID	LT SP	32	30	0.94	45	3.9	88	LANKART 57	3.2	1	4	5.5	281	95	7.3	6.1	120	110	29	11	41	
	3 MID	LT SP	32	30	0.97	46	4.0	86		5.9	4.2	2	4	5.1	288	95	7.1	5.8	120	110	25	20	41
PALMER	1 SLM	LT SP	42	30	0.96	46	4.2	90	LANKART LX571	5.5	4.2	3	4	7.5	275	84	6.0	4.8	130	110	18	12	27
WACO	2 MID	LT SP	32	32	1.00	46	4.2	97	LANKART LX571	5.4	2.6	2	4	5.3	311	108	7.1	5.9	130	110	15	8	52
	3 SLM	LT SP	42	32	1.01	46	3.9	96		5.4	4.9	2	4	6.0	284	99	6.8	5.7	120	110	22	16	31

1/ Reduced from 32 because of bark  
2/ Cotton stuck to processing rolls

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977

Production Area, Classification		Fiber Test Results										Processing Test Results - Carded Yarns										
No	Sample Number	Digital Fibrograph		Fiber Strength		S.A. Elongation		Color		Strength		Elongation		Appearance Index		Imperfect 'ns		Spin. Potential				
		Grade	Staple	2.5% span	Unif.	Mike	Zero	1/8" Gage	Non-Lint	Raw Stock	P & C Waste	22s or 50s	50s or 12 tex	22s or 50s	50s or 12 tex	22s or 50s	50s or 12 tex	No	No	No	No	
32s	In	Pct	Rdg	Mpsi	G/tex	Pct	Pct	Pct	No	No	No	Lbs	Lbs	Pct	Pct	No	No	No	No	No	No	
SOUTHEAST AREA																						
ALABAMA	BELLE MINA	41	32	1.00	46	5.0	88	25	6.2	4.0	2	4	5.9	92	27	5.4	3.8	100	80	18	14	39
1 SLM		41	33	1.06	47	4.8	87	22	6.0	3.6	3	4	5.8	106	35	5.6	4.3	90	70	32	24	56
2 SLM	LT SP	42																				
HILLSBORO		41	34	1.09	48	4.6	85	23	6.4	4.1	2	4	5.6	112	37	5.9	4.7	90	80	18	21	57
SOUTH CENTRAL AREA																						
ARKANSAS	DRIVER	41	35	1.10	46	4.7	88	24	5.8	4.7	1	3	5.8	106	34	5.7	4.0	100	70	16	12	54
1 SLM		41	34	1.09	46	5.0	88	23	5.9	4.0	2	3	6.3	100	32	5.7	3.9	100	80	26	19	53
DUMAS		41	35	1.12	48	5.2	86	23	5.9	2.8	2	3	5.3	109	36	5.8	4.0	110	100	12	10	56
EUDORA		41	35	1.13	48	4.8	85	25	6.8	3.3	1	3	5.3	121	39	6.5	4.8	100	80	18	15	62
HUGHES		41	35	1.12	47	5.0	89	24	5.6	1.9	2	3	5.3	104	33	5.9	4.4	90	70	24	18	57
KEISER		41	34	1.09	43	4.0	85	20	6.2	3.5	2	3	5.4	101	33	6.1	4.3	110	90	19	13	59
LEACHVILLE		41	35	1.11	46	4.6	85	24	6.6	2.4	1	3	4.6	109	37	6.2	4.4	80	70	28	19	59
VICTORIA		41	36	1.14	47	4.8	93	23	5.1	3.4	1	3	4.8	110	36	5.5	4.0	110	90	18	15	61
WILSON		41	34	1.10	46	4.6	88	24	6.7	2.9	1	3	4.0	118	36	6.3	4.6	110	80	15	11	64
1 SLM		42	35	1.14	46	4.5	86	24	6.6	3.1	3	4	4.5	116	40	6.5	5.1	100	80	20	15	70
MISSISSIPPI	CLARKSCALE																					
1 SLM	LT SP	42	36	1.13	47	4.8	87	23	5.7	6.4	3	3	5.9	112	37	6.2	4.4	90	70	29	23	60

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977--(Continued)

Production Area, Classification & Sample Number				Fiber Test Results						Processing Test Results - Carded Yarns					
No	Grade	Styple	2.5% span	Digital Fibrograph	Fiber Strength	Elongat'n 1/8"	S.A. Non-Lint	Color Raw Stock	P. & C	Strength	Elongation	Appearance Index	Imperfect's	Spin. Potential	
No	Name & Code	Styple	Unif. span	Mike	Zero Gage	Gage	Gra Yel	Waste	22s or 50s	22s or 50s	22s or 50s	22s or 50s	22s or 50s	22s or 50s	
32s	In	Pct	Rds	Mpsi	G/tex	Pct	No	No	27 tx	27 tx	12 tx	27 tx	12 tx	27 tx	
SOUTH CENTRAL AREA--(Continued)															
MISSISSIPPI--(Continued)															
GLEENDCRA 1 LM	51	36	1.13	47	5.2	92	23	5.4	4.6	3	2	6.4	11.0	36	5.5
GREENVILLE 1 SLM PLUS	40	36	1.17	47	4.1	88	25	6.8	4.2	0	2	4.7	12.3	42	6.5
GUNNISON 2 SLM	41	35	1.13	47	4.5	88	25	6.3	2.9	2	2	3.9	11.9	41	6.6
HOLLANDALE 1 SLM	41	36	1.18	46	4.2	86	24	6.3	4.2	2	2	5.3	11.9	42	6.1
INDIANOLA 1 SLM	41	35	1.11	47	4.6	89	25	5.7	4.2	2	3	5.9	11.4	37	6.0
INDIANOLA 1 LM PLUS	50	35	1.11	46	4.3	94	24	4.9	4.8	1	2	7.2	10.8	36	5.5
MORGAN CITY 1 SLM	41	35	1.13	45	4.7	83	22	6.0	3.0	2	3	6.0	10.4	35	6.1
TRIBBETT 1 LM PLUS	50	36	1.15	45	4.3	97	23	4.7	4.0	1	2	6.4	11.9	41	5.4
MISSOURI SENATH 1 SLM LT SP	42	34	1.08	45	3.6	81	22	6.1	3.8	2	4	6.4	100	32	6.3
SENATH 1 SLM	41	35	1.13	46	4.3	85	23	6.2	2.7	1	3	5.1	11.5	38	6.4
TENNESSEE BRADEN 1 SLM	41	34	1.08	46	3.9	87	24	6.7	2.4	1	3	4.8	114	38	6.5

Table 3 - Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1977-(Continued)

Production Area,			Fiber Test Results										Processing Test Results - Carded Yarns										
Classification & Sample Number			Digital Fibrograph		Fiber Strength		S.A. Non-Lint		Color Raw Stock		Strength		Elongation		Appearance Index		Imperfect's		Spin. Potential				
No	Grade	Stple	2.5% span	Unif.	Mike Zero	1/8" Gage	Elong'n 1/8"	Gra	Yel	P & C Waste	22s or 50s	22s or 50s	22s or 50s	22s or 50s	22s or 50s	22s or 50s	No	No	No	No	No	No	
			32s	In	Pct	Rdg	Mpsi	G/tex	Pct	Pct	Lbs	Lbs	Lbs	Lbs	Lbs	Lbs	No	No	No	No	No	No	
SOUTHWEST AREA																							
SOUTH TEXAS																							
GANADO																							
2	MID	31	34	1.09	46	4.06	84	23	6.4	3.9	0	3	4.8	110	37	6.0	4.4	90	70	70	20	16	61
SEBASTIAN																							
3	SLM	41	33	1.06	46	4.04	83	22	6.5	2.7	1	4	4.9	110	37	6.6	4.9	100	70	70	14	11	66
CENTRAL TEXAS																							
BATESVILLE																							
2	MID	31	35	1.09	45	4.0	83	23	6.3	2.4	0	4	5.2	113	38	6.2	4.7	90	70	70	14	12	64
3	MID	31	35	1.09	46	4.02	85	22	5.8	2.5	0	4	4.7	110	36	5.9	4.4	90	70	70	20	16	59
CROCKETT																							
1	SLM	41	34	1.03	46	4.9	92	22	5.3	3.4	3	3	6.2	83	23	4.4	3.8	90	80	80	23	20	25
GRANDVIEW																							
1	MID	31	30	0.98	45	4.0	92	22	5.6	3.2	0	3	4.9	87	26	5.3	3.9	90	60	60	27	23	36
NAVASCTA																							
1	MID	31	35	1.06	46	4.6	93	25	6.3	2.2	1	3	4.2	110	35	6.0	4.4	90	70	70	10	9	58
2	SLM	41	35	1.14	47	4.3	89	24	6.2	2.2	1	3	4.4	115	39	6.2	4.6	100	90	90	21	16	66

1/ End breakage too high to spin 50s yarn. 36s yarn spun and strength adjusted to equivalent of 50s.

